AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled).

2. (Currently Amended) ~~The molding process of claim 1~~ A molding process of a composite material including forming a high-thermal conductor and a room temperature magnetic refrigerant material, wherein said room temperature magnetic refrigerant material is nested with said high-thermal-conductor to obtain said composite material; and wherein said room temperature refrigerant material is processed to a shape of particle, sheet, or filament having a diameter or thickness greater than 0.001 mm, and the composite material is in a shape of particle, sheet unit, or filament having a diameter or thickness smaller than 1 mm, wherein the melting point of said high-thermal conductor is lower than that of said room temperature magnetic refrigerant material; melting said high-thermal-conductor under a vacuum or an inert atmosphere; adding said room temperature magnetic refrigerant material to said melted high-thermal conductor; cooling said melted high-thermal conductor containing said room temperature magnetic refrigerant material under a vacuum or inert atmosphere and forming a solid; and machining said solid to small balls having diameters of less than 0.5 mm.

3. (Currently Amended) ~~The molding process of claim 1~~ A molding process of a composite material including forming a high-thermal conductor and a room temperature magnetic refrigerant material, wherein said room temperature magnetic refrigerant material is nested with said high-thermal-conductor to obtain said composite material; and wherein said room temperature refrigerant material is processed to a shape of particle, sheet, or filament having a diameter or thickness greater than 0.001 mm, and the composite material is in a shape of particle, sheet

unit, or filament having a diameter or thickness smaller than 1 mm, wherein said composite material is obtained by preparing at least two high-thermal-conductor sheets, adding said room temperature refrigerant material to a liquid thermal conductive agent, sealing said liquid thermal conductive agent containing said magnetic refrigerant material between said at least two high-thermal-conductor sheets and compressing them into sheet units of thickness less than 1 mm; and dividing said sheets into small isolated areas by completely pressing together the said sheet units at designated points.

4. (Currently Amended) ~~The molding process of claim 1~~ A molding process of a composite material including forming a high-thermal conductor and a room temperature magnetic refrigerant material, wherein said room temperature magnetic refrigerant material is nested with said high-thermal-conductor to obtain said composite material; and wherein said room temperature refrigerant material is processed to a shape of particle, sheet, or filament having a diameter or thickness greater than 0.001 mm, and the composite material is in a shape of particle, sheet unit, or filament having a diameter or thickness smaller than 1 mm, including processing said room temperature magnetic refrigerant material into sheets, strips or filaments; inserting said high-thermal-conductor between said sheets, strips or filaments; and wherein said high-thermal-conductor and said sheets, strips or filaments contact each other closely.

5. (Cancelled).

6. (Previously Presented) The molding process of claim 3, wherein said room temperature magnetic refrigerant material comprises super-paramagnetism or ferromagnetism room temperature magnetic refrigerant material and is cut, crushed, ball grinded, plasma spray coated or processed by physical or chemical methods to form said particles.

7. (Previously Presented) The molding process of claim 3, wherein the thickness of said sheets is less than 0.1 mm, and the thickness of said sheet units is less than 0.2 mm.

8. (Cancelled).

9. (Previously Presented) The molding process of claim 4, wherein said room temperature magnetic refrigerant material is gadolinium, wherein said high-thermal-conductor is copper; wherein the thickness of a gadolinium sheets is 5-100 μm; wherein the thickness of a copper sheet is 5-100 μm; and wherein said gadolinium sheets and said copper sheets are stacked alternately together.

10. (Previously Presented) The molding process of claim 4, wherein said room temperature magnetic refrigerant material is gadolinium, wherein said high-thermal-conductor is copper; and inserting an aluminum foil between said gadolinium and said copper sheets; and compressing and heating the resulting stacked sheet to at least 934 K to melt said aluminum foil and to obtain a closer contact between said gadolinium and said copper sheet.

11. (Previously Presented) The molding process of claim 10, including processing said stacked sheets into honeycombed shape.

12. (Previously Presented) The molding process of claim 2, wherein the surface of said balls is plated with a layer of an oxidation proof metal.

13. (Previously Presented) A process for making a composite material, comprising:

preparing at least two high-thermal-conductor sheets, adding a room temperature refrigerant material to a liquid thermal conductive agent, sealing said liquid thermal conductive agent containing said magnetic refrigerant material between said at least two high-thermal conductor sheets and compressing them into

sheet units of thickness less than 1 mm; and dividing said sheets into small isolated areas by completely pressing together said sheet units at designated points; wherein said room temperature refrigerant material is processed to a shape of a particle, sheet, or filament having a diameter or thickness greater than 0.001 mm;

stacking said sheet units and creating salient points between said sheet units to form a liquid path; the height of the salient points being not more than the thickness of the sheet units, spreading a metal powder having a particle size of 0.1 mm to 1 mm between said sheet units; and the thickness of the stacked sheet units being between 1 mm and 100 mm.

14. (Previously Presented) The process of claim 13, wherein said room temperature magnetic refrigerant material comprises super-paramagnetism or ferromagnetism room temperature magnetic refrigerant material, and said high-thermal-conductor sheets are comprised of copper.